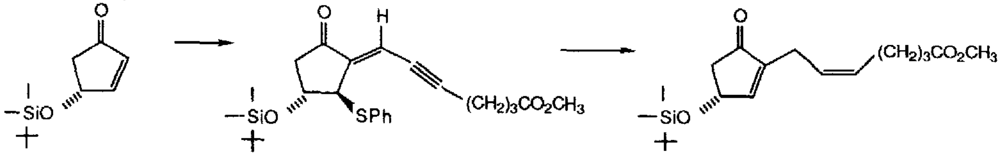
Tetrahedron Lett. 30,13(1989)

A NOVEL AND EFFICIENT ROUTE TO PROSTANOID INTERMEDIATES

Jeremy I. Levin, American Cyanamid Company,
Medical Research Division, Lederle Laboratories,
Pearl River, N.Y. 10965

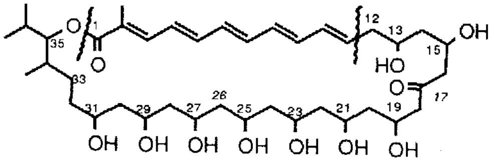


Tetrahedron Lett. 30,15(1989)

PROGRESS TOWARD ROFLAMYCOIN; SYNTHESIS OF THE C-12 to C-35 SECTION IN HOMOCHIRAL FORM

Bruce H. Lipshutz, Robert Moretti, and Robert Crow
Department of Chemistry, University of California
Santa Barbara, CA 93106 USA

A 24 carbon fragment characteristic of the (presumed all syn) polyene macrolide roflamycoin has been prepared in optically pure form.



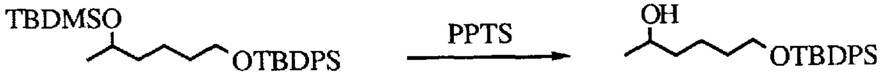
Roflamycoin

Tetrahedron Lett. 30,19(1989)

SELECTIVE DE-PROTECTION OF SILYL ETHERS

Chandra Prakash, Samir Saleh, and Ian A. Blair
Departments of Pharmacology and Chemistry, Vanderbilt University, Nashville, TN 37232

Pyridinium p-toluenesulfonate has been found to remove t-butyldimethylsilyl (TBDMS) ethers selectively in the presence of t-butyldiphenylsilyl (TBDPS) ethers.

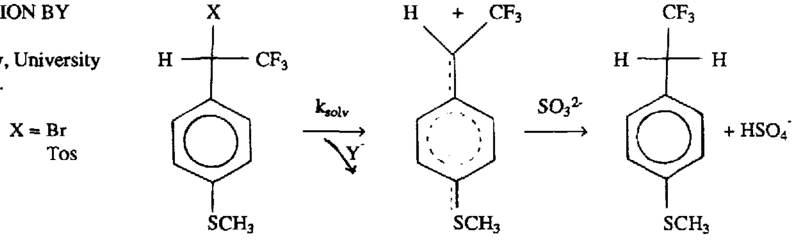


Tetrahedron Lett. 30,23(1989)

REDUCTION OF THE 1-(4-THIOMETHYLPHENYL)-2,2,2-TRIFLUOROETHYL CARBOCATION BY SODIUM SULFITE

John P. Richard, Department of Chemistry, University of Kentucky, Lexington, KY, 40506-0055.

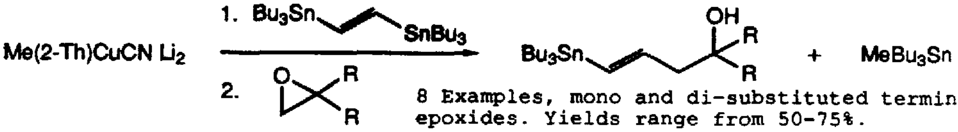
The 1-(4-thiomethylphenyl)-2,2,2-trifluoroethyl carbocation formed by unimolecular dissociation of neutral precursors is reduced to the alkane by SO_3^{2-}.



Tetrahedron Lett. 30, 27 (1989)

THE SYNTHESIS OF β-HYDROXY-(E)-VINYLSTANNANES USING AN "IN-SITU" CUPRATE REAGENT DERIVED FROM (E)-BIS-(TRIBUTYLSTANNYL)ETHYLENE.

James R. Behling, John S. Ng, Kevin A. Babiak, Arthur L. Campbell*
Chemical Development Department, G.D. Searle Co., Skokie, Il. 60077
Edmund Elsworth and Bruce Lipshutz*, Department of Chemistry,
University of California, Santa Barbara, Ca. 93106



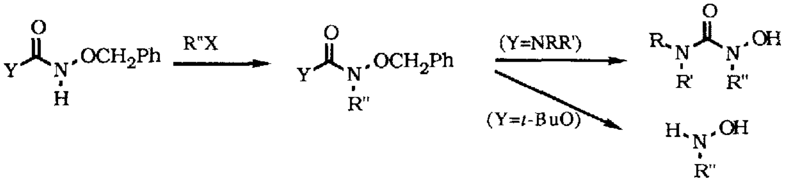
8 Examples, mono and di-substituted terminal epoxides. Yields range from 50-75%.

Tetrahedron Lett. 30, 31 (1989)

ALKYLATION OF N-BENZYLOXYUREAS AND CARBAMATES

Richard Sulsky and James P. Demers
Research Laboratories, Ortho Pharmaceutical Corporation, Raritan NJ 08869

N-Benzyloxyureas and orthogonally protected N-hydroxycarbamates can be alkylated in high yields and subsequently deprotected to provide N-alkyl hydroxyureas and hydroxylamines.

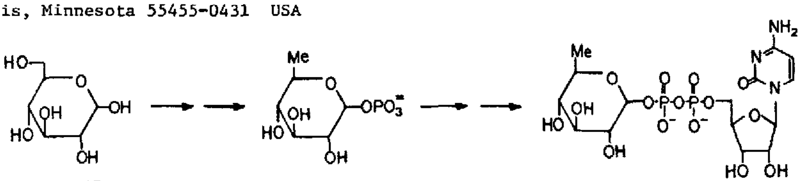


Tetrahedron Lett. 30, 35 (1989)

SYNTHESIS OF CYTIDINE DIPHOSPHATE-D-QUINOVOSE

Li-da Liu and Hung-wen Liu*

Department of Chemistry, University of Minnesota
Minneapolis, Minnesota 55455-0431 USA



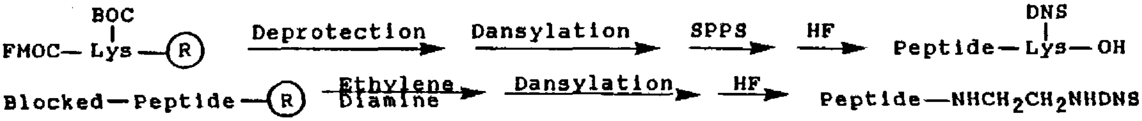
GLUCOSE 2 1

Tetrahedron Lett. 30, 39 (1989)

METHODS FOR THE CARBOXYL-TERMINAL FLUORESCENT LABELING OF PEPTIDES USING SOLID PHASE PEPTIDE SYNTHESIS.

Angelo P. Consalvo, Paul P. Tamburini, William Stern and Stanley D. Young*
Unigene Laboratories, Inc., Fairfield, N.J. 07006 USA

Two methods for labeling synthetic peptides with a 5-dimethyl-amino-1-napthalenesulfonyl (dansyl, DNS) group at the C-terminal residue using solid phase peptide synthesis (SPPS) are described.



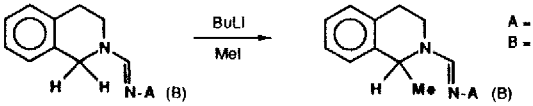
$$\text{FMOC—}\overset{\text{BOC}}{\overset{|}{\text{Lys}}}\text{—}\textcircled{\small R}\xrightarrow{\text{Deprotection}}\xrightarrow{\text{Dansylation}}\xrightarrow{\text{SPPS}}\xrightarrow{\text{HF}}\text{Peptide—}\overset{\text{DNS}}{\overset{|}{\text{Lys}}}\text{—OH}$$

$$\text{Blocked—Peptide—}\textcircled{\small R}\xrightarrow[\text{Diamine}]{\text{Ethylene}}\xrightarrow{\text{Dansylation}}\xrightarrow{\text{HF}}\text{Peptide—NHCH}_2\text{CH}_2\text{NHDNS}$$

Tetrahedron Lett. 30,43(1989)

α-AMINO CARBANIONS. A COMPETITION STUDY TO ASSESS RELATIVE ACIDITIES IN VARIOUS FORMAMIDINES

Michael A. Gonzalez and A. I. Meyers*
Department of Chemistry, Colorado State University, Fort Collins, Colorado 80523



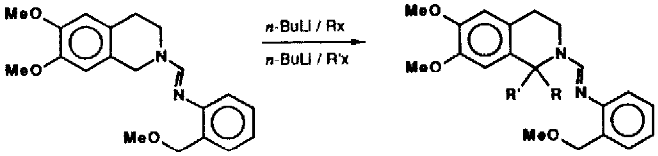
A = *t*-Bu, others
B = Phenyl (*o*-methoxy) etc.

Two different formamidines were allowed to compete for a deficiency of n-butyllithium and the ratios of methylated product assessed.

Tetrahedron Lett. 30,47(1989)

α-AMINO CARBANIONS. A SECOND GENERATION FORMAMIDINE FOR FACILE DEPROTONATION LEADING TO α-QUATERNARY SUBSTITUTION

Michael A. Gonzalez and A. I. Meyers*
Department of Chemistry, Colorado State University, Fort Collins, Colorado 80523



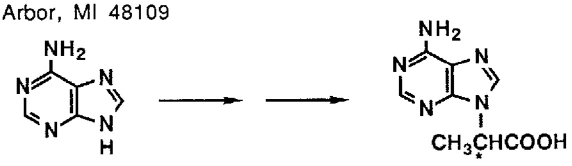
Use of the *o*-methoxymethyl anilino group in formamidines allows double metalation-alkylation for the first time.

Tetrahedron Lett. 30,51(1989)

SYNTHESIS OF OPTICALLY ACTIVE α-NUCLEIC ACID BASE SUBSTITUTED PROPANOIC ACIDS

C. G. Overberger and Ji Young Chang
Department of Chemistry and the Macromolecular Research Center
The University of Michigan, Ann Arbor, MI 48109

The (R)- α-nucleic acid base substituted propanoic acids were synthesized.



Tetrahedron Lett. 30,55(1989)

SELECTIVE REDUCTIONS OF CONJUGATED ACETYLENES WITH MAGNESIUM AND METHANOL AND METHANOL-D

Robert O. Hutchins* and Suchismita, Department of Chemistry, Drexel University, Philadelphia, PA 19104,Robert E. Zipkin, Ira M. Taffer, R. Sivakumar, Arthur Monaghan and E. Michael Elisseou,BIOMOL Research Laboratories, Inc., 5166 Campus Drive, Plymouth Meeting, PA 19462

The combination of Mg in methanol or methanol-d provides a convenient and effective system for the reduction of acetylenic bonds conjugated to esters or to two phenyl groups to the saturated or tetradeuterated derivatives.

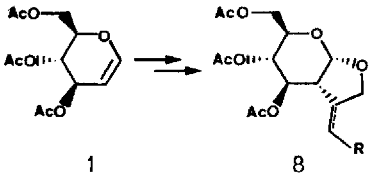
$$R\text{-}C{\equiv}CCOOCH_3 \xrightarrow[\text{MeOH (MeOD)}]{\text{Mg}} RCH_2(D_2)CH_2(D_2)COOCH_3$$

Tetrahedron Lett.30,57(1989)

STEREOSELECTIVE C-C BOND FORMATION IN CARBOHYDRATES BY RADICAL CYCLIZATION REACTIONS-II.

Alain De Mesmaeker*, Pascale Hoffmann, Beat Ernst
Central Research Laboratories, Ciba-Geigy Ltd.,
CH-4002 Basel, Switzerland.

The synthesis of the bicyclic acetals 8 from the glycal 1 using a radical cyclization reaction is described.



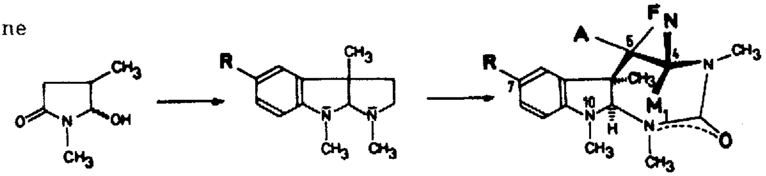
1 8

Tetrahedron Lett.30,61(1989)

Isoeserin und Homoisoeserin. Darstellung und Strukturaufklärung des Indolo-1.3-diazepinsystems.

Peter Rosenmund, Simeon Gektidis, Hannelore Brill und Renata Kalbe,
Chemisches Institut der Universität, D-6000 Frankfurt/M. Niederurseler Hang. W.-Germany.

C-ring enlargement of eseroline and homoeseroline to indolo-1.3-diazepines.

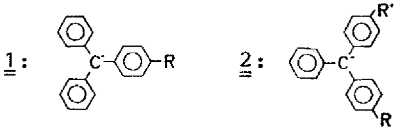


Tetrahedron Lett.30,63(1989)

ENDOR INVESTIGATIONS ON THE CAPTO-DATIVE STABILISATION OF TRIPHENYLMETHYL RADICALS

M.Lehnig and U.Stewen, Fachbereich Chemie,
Universität Dortmund, D-4600 Dortmund 50

Splitting parameters of radicals 1 and 2 are given. The stabilisation of radicals 2 by the combination of an electron accepting and an electron donating substituent is estimated to be 0.5 - 2 kcal/mol.

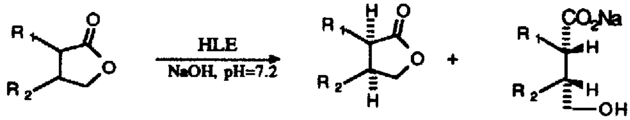


R, R′= tBu-,-OMe,-OPh
-CF_3,-CN,-COPh

Tetrahedron Lett.30,67(1989)

ENZYMATIC RESOLUTION OF RACEMIC BICYCLIC LACTONES BY HORSE LIVER ESTERASE.

E. Guibé-Jampel, G. Rousseau, L. Blanco
Laboratoire des Carbocycles (Unité Associée au C.N.R.S.), I.C.M.O., Bât. 420
Université de Paris-Sud, 91405 ORSAY (France)

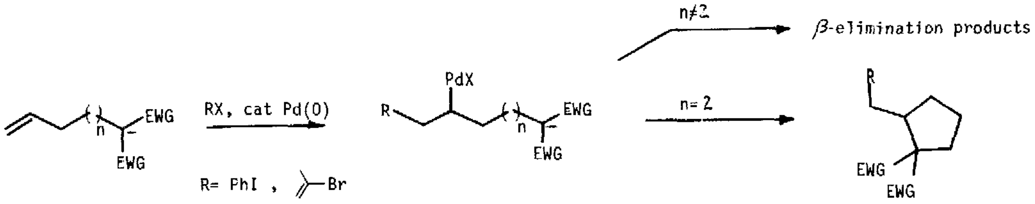


R_1-R_2=(CH_2)to(CH_2)$_4$ and -CH_2CH=$CHCH_2$- ee:3to98%

Tetrahedron Lett. 30,69(1989)

NEW PALLADIUM MEDIATED CYCLOPENTANATION OF ALKENES BEARING A δ NUCLEOPHILIC SUBSTITUENT.

Guy FOURNET, Geneviève BALME et Jacques GORE,
Université Claude Bernard - LYON I , 69622 VILLEURBANNE, France.

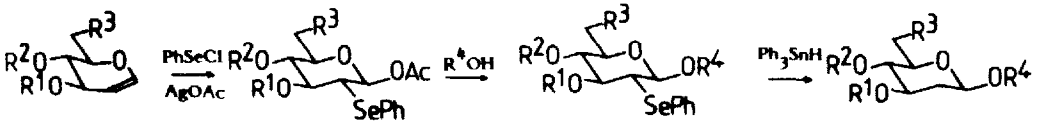


Tetrahedron Lett. 30,75(1989)

SELENIUM-MEDIATED GLYCOSIDATIONS: A SELECTIVE SYNTHESIS OF β-2-DEOXYGLYCOSIDES

Michel Perez and Jean-Marie Beau*

Université d'Orléans, Laboratoire de Biochimie Structurale associé au CNRS,
BP 6759, 45067 Orléans, France

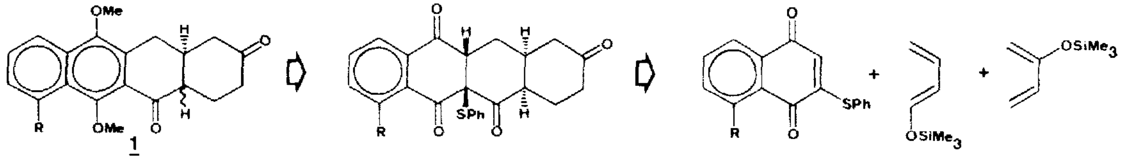


SYNTHESIS OF (±) 11-DEOXYDAUNOMYCINONE AND 4-DEMETHOXY ANALOGUE BY SEQUENTIAL DIELS-ALDER CYCLOADDITIONS.

Tetrahedron Lett. 30,83(1989)

Sylvain Laugraud, André Guingant and Jean d'Angelo*
ESPCI, 10 rue Vauquelin, 75231 Paris Cedex 05 (FRANCE).

Tetracycles 1 , known key intermediates in the total synthesis of title compounds, were prepared by sequential Diels-Alder cycloadditions :

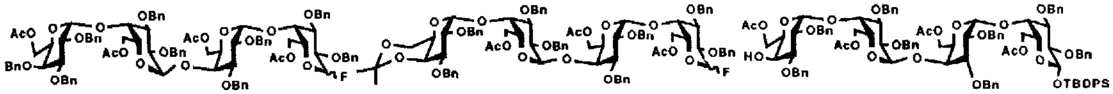


Tetrahedron Lett. 30,87(1989)

TOTAL SYNTHESIS OF GALACTODODECAOSIDURONIC ACID, AN ENDOGENOUS PHYTOALEXIN ELICITOR ISOLATED FROM SOYBEAN CELL WALL

Yoshiaki Nakahara and Tomoya Ogawa
RIKEN (The Institute of Physical and Chemical Research), Wako-shi, Saitama, 351-01 Japan

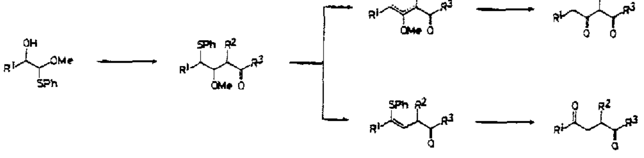
A stereoselective synthesis of galactododecaosiduronic acid, a most active endogenous phytoalexin elicitor, was achieved by use of the three key intermediates.



Tetrahedron Lett.30,91(1989)

DIVERGENT SYNTHESIS OF 1,3- AND 1,4-DIKETONES FROM β-METHOXY-γ-PHENYLTHIO KETONES ACCESSIBLE THROUGH NOVEL PHENYLTHIO MIGRATION REACTION

Tsuneo Sato, Masami Inoue, Satoru Kobara, Junzo Otera,* and Hitosi Nozaki
Department of Applied Chemistry, Okayama University of Science, Ridai-cho, Okayama 700, Japan

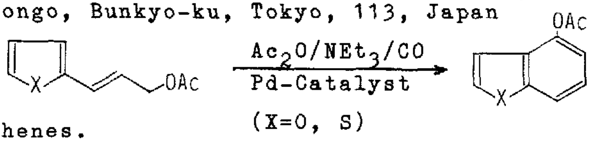


Tetrahedron Lett.30,95(1989)

SYNTHESIS OF BENZOFURANS AND BENZOTHIOPHENES BY PALLADIUM CATALYZED CYCLOCARBONYLATION OF 3-FURYLALLYL AND 3-THIENYLALLYL ACETATES

Masakazu Iwasaki, Ji-ping Li, Yoshihiro Kobayashi, Hiroyuki Matsuzaka, Youichi Ishii, and Masanobu Hidai*
Department of Synthetic Chemistry, Faculty of Engineering, The University of Tokyo, Hongo, Bunkyo-ku, Tokyo, 113, Japan

The cyclocarbonylation was successfully applied to the synthesis of benzofurans and benzothiophenes.

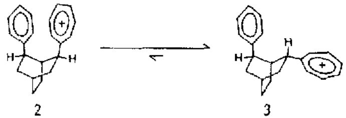


Tetrahedron Lett.30,99(1989)

STEREOMUTATION OF ENDO-2-PHENYL-ENDO-6-TROPYLIOBICYCLO[2.2.2]OCTANE TO THE EXO-6-TROPYLIO ISOMER. STERIC REPULSION BETWEEN THE PHENYL AND TROPYLIUM RINGS SHOWING INTRAMOLECULAR CHARGE-TRANSFER

Keizo Ikai, Ken'ichi Takeuchi,* Koichi Komatsu,* Ryotaro Tsuji, Tomomi Kinoshita, and Kunio Okamoto
Department of Hydrocarbon Chemistry, Faculty of Engineering, Kyoto University, Sakyo-ku, Kyoto 606, Japan

The ion **2** which shows intramolecular CT rearranges to **3** owing to steric repulsion between the two facing rings.

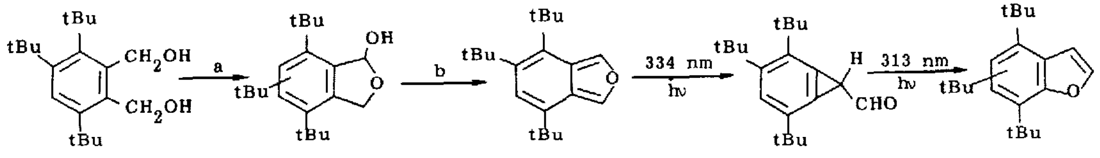


2 **3**

Tetrahedron Lett.30,103(1989)

SYNTHESIS AND PHOTOCHEMICAL REACTION OF A STABLE ISOBENZOFURAN DERIVATIVE

Sadao Miki, Masahiro Yoshida and Zen-ichi Yoshida*
Department of Synthetic Chemistry, Kyoto University, Yoshida Kyoto 606 Japan

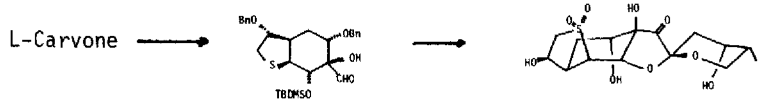


a ; Collins oxidation, b ; heat 100°C/0.1 mmHg

Tetrahedron Lett. 30,105(1989)

SYNTHETIC STUDY ON BREYNIN A : SYNTHESIS OF BREYNOLIDE SULFONE

Shigeru Nishiyama, Yoichi Ikeda, Shin-ichi Yoshida, and Shosuke Yamamura*
Department of Chemistry, Faculty of Science and Technology, Keio University, Hiyoshi, Yokohama, Japan

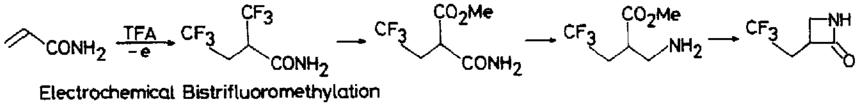


Tetrahedron Lett. 30,109(1989)

BISTRIFLUOROMETHYLATION OF ACRYLAMIDE FOR TRIFLUOROMETHYLATED SYNTHETIC BLOCKS

Kenji Uneyama,* Osamu Morimoto, and Hiromi Nanbu

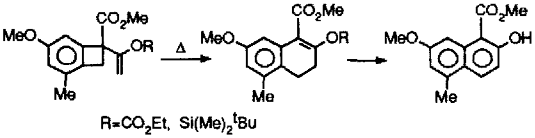
4,4,4-Trifluoro-2-trifluoromethylbutyrylamide has been electrochemically prepared and transformed into β-amino acid and β-lactam.



Tetrahedron Lett. 30,111(1989)

AN EFFICIENT SYNTHESIS OF THE NAPHTHALENE MOIETY OF NEOCARZINOSTATIN CHROMOPHORE

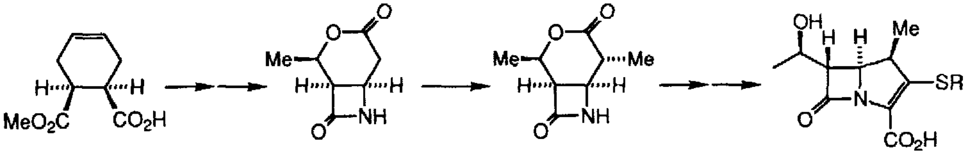
Kozo Shishido[a], Akitake Yamashita[a], Kou Hiroya[a], Keiichiro Fukumoto[a]*, and Tetsuji Kametani[b]
[a]Pharmaceutical Institute, Tohoku University, Aobayama, Sendai 980, Japan
[b]Institute of Medicinal Chemistry, Hoshi University, Ebara 2-4-41, Shinagawa-ku, Tokyo 142, Japan



Tetrahedron Lett. 30,113(1989)

A Stereoselective Route to the Key Intermediate of 1β-Methylcarbapenems by Chemicoenzymatic Approach

Harumi Kaga, Susumu Kobayashi, and Masaji Ohno
Faculty of Pharmaceutical Sciences, University of Tokyo,
Hongo, Bunkyo-ku, Tokyo 113

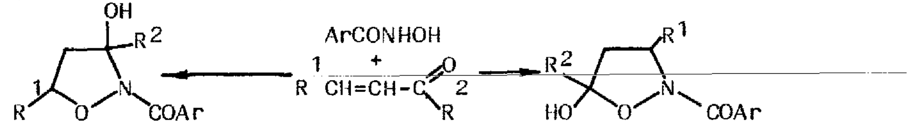


Tetrahedron Lett.30,117(1989)

SYNTHESIS OF HYDROXYISOXAZOLIDINES ON ADSORBENTS.

I.A.Motorina*, L.A.Sviridova, G.A.Golubeva, Yu.G.Bundel
Department of Chemistry, Moscow State University, Moscow, USSR

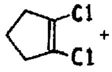
The regioselectivity of the interaction between alkenals and hydroxamic acids depends on the type of adsorbent.



Tetrahedron Lett.30,121(1989)

UNUSUAL C-C BOND CLEAVAGE IN A FIVE MEMBERED RING

Gopalpur Nagendrappa
Engler-Bunte Institut, Bereich Petrochemie,
Universität Karlsruhe, 7500 Karlsruhe,
West Germany



$$+ \text{Na} + \text{ClSiMe}_3 \xrightarrow{50\text{-}55^\circ} \text{X-CH}_2\text{-CH}_2\text{-CH}_2\text{-C}\equiv\text{C-SiMe}_3$$

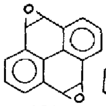
$\text{X} = \text{H; SiMe}_3$

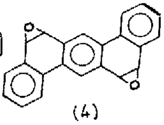
Tetrahedron Lett.30,123(1989)

GENERAL SYNTHETIC ROUTES TO DIARENE OXIDES OF POLYCYCLIC AROMATIC HYDROCARBONS.

Shiv K. Agarwal[a], Derek R. Boyd,[a] W. Brian Jennings,[b] Rosaleen M. McGuckin,[a] and Gerard A. O'Kane,[a]
[a]Department of Chemistry, The Queen's University of Belfast, Belfast, BT9 5AG. U.K.
[b]Department of Chemistry, University of Birmingham, Birmingham, BT15 2TT, U.K.

Diarene oxides are synthesised by dimethyldioxirane oxidation of monoarene oxides (2,4,7) or by cyclization reactions on bromoacetate precursors (6,7,12,13).


(2)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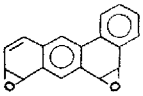
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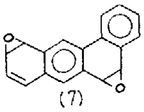
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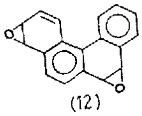
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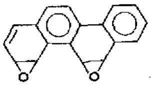
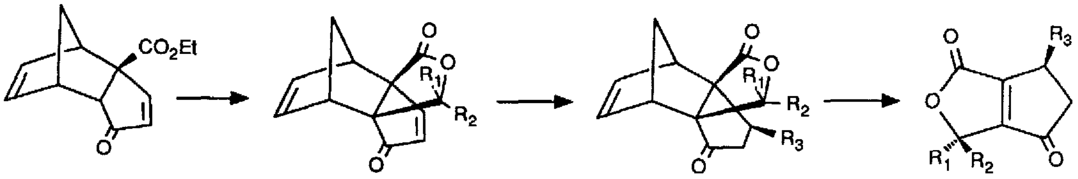

(13)

Tetrahedron Lett.30,127(1989)

SYNTHESIS OF BRIDGED [4.3.3]OXAPROPELLANES BY ANGULAR CONDENSATION OF ETHYL TRICYCLODECADIENONE 2-CARBOXYLATE AND THEIR THERMAL CONVERSION INTO LACTONE ANNELATED CYCLOPENTENONES

J.H.M. Lange, A.J.H. Klunder and B. Zwanenburg*
Department of Organic Chemistry, University of Nijmegen,
Toernooiveld, 6525 ED NIJMEGEN, The Netherlands



Tetrahedron Lett. 30,131(1989)

SPIROFORSKOLIN : ACID CATALYSED REARRANGEMENT PRODUCT OF FORSKOLIN

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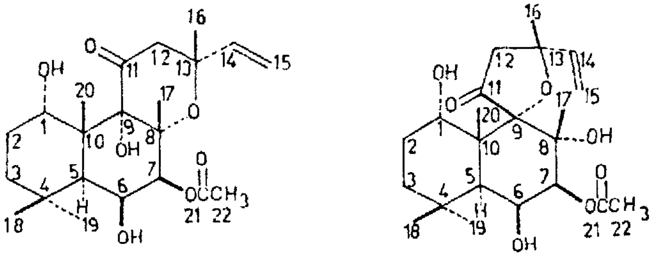

Tetrahedron Lett. 30,133(1989)

ISOSARAIN-1: A NEW ALKALOID FROM THE MEDITERRANEAN SPONGE *RENIERA SARAI* [1]

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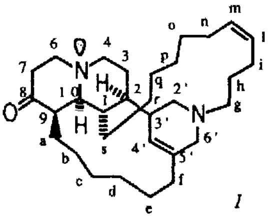
The structure of the title compound (*1*) is reported. Isosarain-1 (*1*) has a key role in the structural study of the previously partially characterized sarains 1-3 (*3-5*).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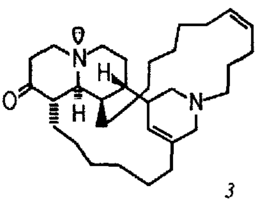
3

Tetrahedron Lett. 30,137(1989)

STEREOCONTROLLED LACTONIZATION REACTIONS VIA PALLADIUM-CATALYSIS

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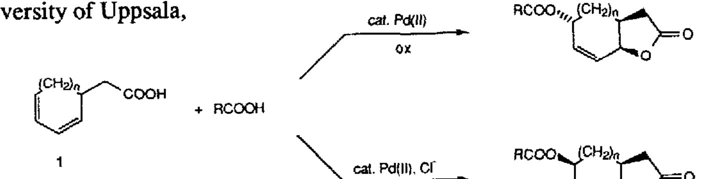
A palladium-catalyzed lactonization reaction of diene substrates **1** was developed, that offers a dual stereoselectivity in the addition step.



Tetrahedron Lett. 30,141(1989)

The Biosynthesis of *Sceletium* Alkaloids in *Sceletium Subvelutinum* L. Bolus

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